

Facility Damage Prevention and Control (FDPC) Plan

For the

Velella Epsilon Project –

Pioneering Offshore Aquaculture in the Southeastern Gulf of Mexico

NOAA Sea Grant 2017 Aquaculture Initiative



Submitted to:

U.S. Environmental Protection Agency (EPA) Region 4
National Pollutant Discharge and Elimination System (NPDES)
Permitting and Enforcement Branch

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September 2022

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Facility Damage Prevention and Control (FDPC) Plan

Facility Name: Velella Epsilon Project
Prepared Date: 8 September 2022
NPDES Permit No.: FLOA00001
Facility Manager: Dennis Jay Peters

On June 8th, 2022, EPA made public notification of the issuance of Final NPDES permit for Ocean Era Velella Epsilon (FLOA00001). In compliance with the requirements of this permit, within 90 days of permit issuance, Ocean Era is responsible for the development, submittal, approval, and implementation of four (4) component plans; Best Management Practices (BMP) Plan, Environmental Monitoring Plan (EMP), Facility Damage Prevention and Control (FDPC) Plan, and a Quality Assurance Project Plan (QAPP). Approval of the plans must occur prior to authorization of any discharge (i.e., stocking of any fish).

The contents of this document comprise the FDPC Plan which outlines the Prevention Practices (maintenance, risks, procedures, containment equipment, reporting, emergency contacts, fish transfer, and emergency procedures) and the Disaster Response (notification procedures, emergency reporting, response and clean-up, and procedures for debris and carcass disposal). During the period beginning on the effective date and lasting through the expiration date of this permit, Ocean Era is authorized to discharge industrial wastewater from the Velella Epsilon (VE) Project (aquatic animal production facility) into the Gulf of Mexico for one production cycle.

1.0 Facility / Project Description

The Velella Epsilon Project proposes to validate the feasibility of a temporary, small-scale, demonstration net pen to stock, culture, and harvest a Federally managed species (Almaco jack; *Seriola rivoliana*); conduct environmental monitoring – water quality and benthic analyses per EPA & USACE requirements; and address public concerns of open ocean aquaculture in the Gulf of Mexico (Gulf) by (1) demonstrating fish aggregation device (FAD) effects to GOM fishing communities; and addressing public concerns of open ocean aquaculture in the GOM by (2) encouraging the public and tourists to visit the demonstration site.

1.1 Species / Annual Production

The project will culture a single cohort of approximately 20,000 fish (Kampachi; *Seriola rivoliana*) which will be reared for approximately 12 months. The estimated final fish size is approximately 4.4 pounds (lbs.) (2 kilograms [kg]), meaning the total maximum harvest weight is estimated to be approximately 88,000 lbs. (39,916 kg). The maximum amount of feed is estimated to be 27,268 lbs. (12,369 kg) per month.

1.2 Net Pen Array Configuration / Operation

The Velella Epsilon Project will utilize a single PolarCirkel-style net pen array that consists of an offshore-strength submersible circular cage with a diameter of approximately 17 meters and a depth of 7 meters, contained within a high-density polyethylene frame. The submersible net pen will be deployed on an engineered multi-anchor swivel (MAS) mooring system. The engineered MAS will have up to three

anchors for the mooring, with a swivel and bridle system. The net pen array utilizes embedment-type anchor mooring; and is serviced by a tender vessel/feed barge tethered to side of net pen system. The cage material for the proposed project is constructed with rigid and durable materials (copper mesh net). The mooring lines for the proposed project will be attached to a floating cage that will rotate in the prevailing current and/or wind direction. The ocean currents and/or winds will maintain the mooring rope and chain under tension during most times of operation.

The cage design is flexible and self-adjusts to suit the constantly changing wave, wind, and current conditions. As a result, the system can operate floating on the ocean surface or submerged within the water column of the ocean. When a storm approaches the area, the entire cage array can be submerged by using a valve to flood the floatation system with water. A buoy remains on the surface, marking the net-pen's position and supporting the air hose. When the pen approaches the bottom, the system can be maintained several meters above the sea floor. The cage system is still able to rotate around the MAS and adjust to the currents while it is submerged. After storm events, the cage system is made buoyant to resume normal operational conditions. The net pen array is estimated to be constructed and deployed in the January 2021 timeframe.

1.3 Location

The Velella Epsilon Project is located in the Gulf in approximately 40m water depth off southwest Florida, generally located 45 miles southwest of Sarasota, Florida. **Figure 1** provides the location of VE Project demonstration farm site. The VE Project location was originally sited by conducting a geophysical baseline survey of the proposed area, and whose data were ultimately summarized, reorganized, and augmented to fulfil the requirements of the *Baseline Environmental Survey Guidance and Procedures for Marine Aquaculture Activities in U.S. Federal Waters of the Gulf of Mexico, October 24th, 2016*.

The overall area is defined as approximately 1.3 x 1.3 nautical miles (nm; 1.7-square nm-site area). Water depths across this area ranged from a minimum depth of 38.3m to a maximum depth of 42.6m. The net pen array will be placed within a subset of that area that contains unconsolidated sediments that are approximately 3 to 10 ft deep. VE Project engineers will ultimately select a specific location within that area based on a diver-assisted assessment of the sea floor when the cage and MAS are deployed. The proposed action area is 3,281 feet (1,000 m) radius from the center of the MAS.

Table 1. Target Area with 3' to 10' of Unconsolidated Sediments

Location	Latitude	Longitude
Upper Left Corner	27° 7.70607' N	83° 12.27012' W
Upper Right Corner	27° 7.61022' N	83° 11.65678' W
Lower Right Corner	27° 6.77773' N	83° 11.75379' W
Lower Left Corner	27° 6.87631' N	83° 12.42032' W

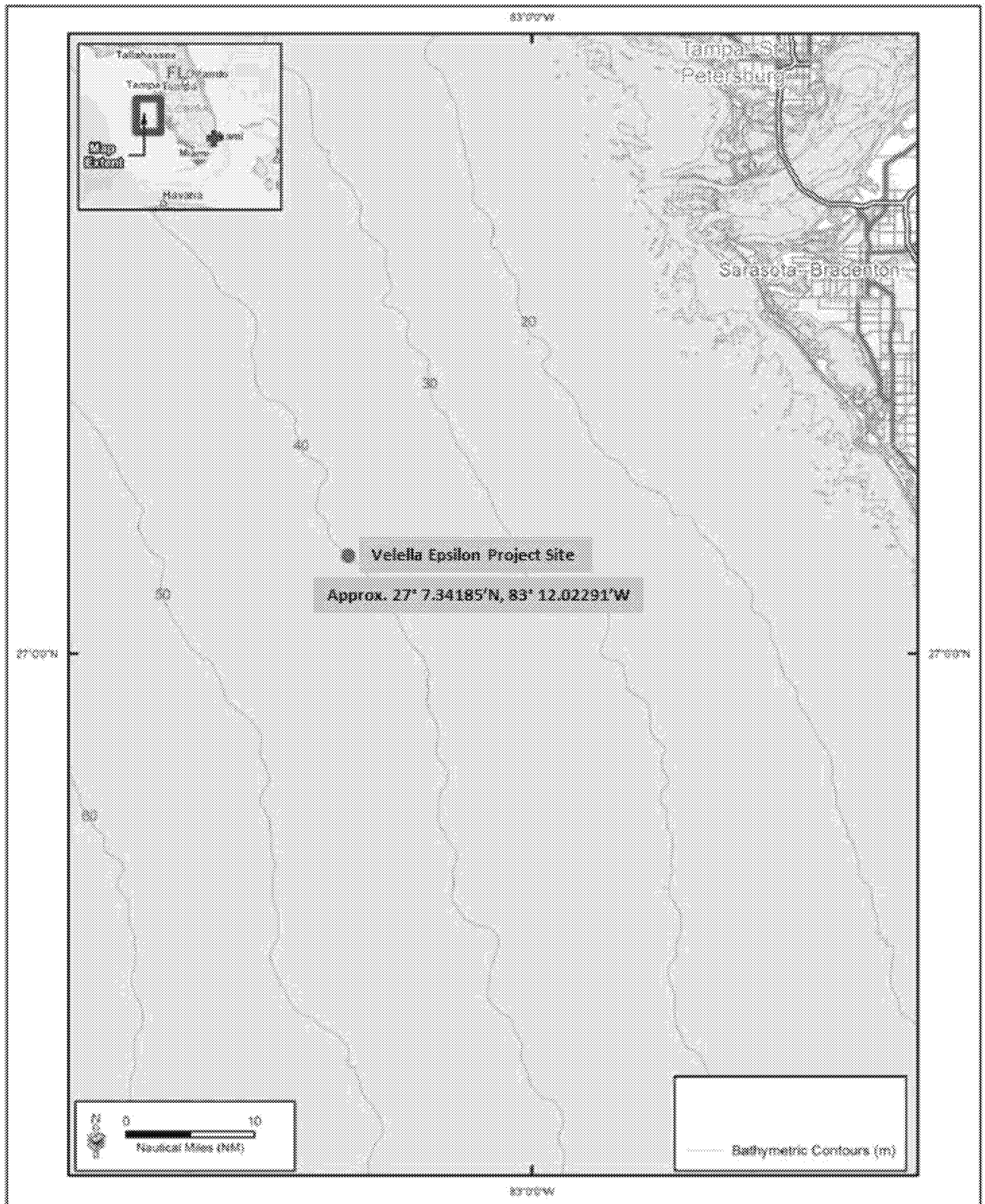


Figure 1. Velella Epsilon Project Site Location

2.0 Prevention Practices

The Velella Epsilon project personnel will ensure that optimal management, monitoring, preparedness, and post storm practices are adhered to for the prevention of facility and stock damage or loss in the event of tropical storms or hurricanes. As such, the Velella Epsilon staff is committed to operating and maintaining all facility components in a structurally sound manner in order to prevent or minimize the impact of disasters.

2.1 Installation Maintenance

The Velella Epsilon project personnel will ensure that all equipment is maintained in proper operational condition by:

- Performing routine maintenance inspections (i.e., visual, camera, diver-assisted) of the net pen array system to identify and promptly repair any damage to:
 - Coppernet and bird/fish containment netting
 - Mooring lines, cables, and chains
 - Embedment anchors
 - Buoys, lines, markers, and lights
 - Tender and operational vessel equipment and systems (i.e., generation, refrigeration)
 - Communications equipment and networks
- Regularly conducting maintenance of the net pen array system in order to ensure that it is properly functioning.
 - Repairs to all above items.
 - Special attention will be given to connectors and rope/chain interfaces. Chafe points will be identified inspected, and biofouling removed.
 - Shackles used in mooring systems will be either safety shackled, wire-tied, or welded to prevent pin drop-out.
- Velella Epsilon staff will conform with and maintain the net pen array equipment in accordance with all applicable manufacturer requirements and recommendations.
- The maintenance schedule and reporting for all facility components are captured in Appendix D and Appendix E, of the *BMP Plan for the Velella Epsilon Project – Pioneering Offshore Aquaculture in the Southeastern Gulf of Mexico* (Ocean-Era, 2020a).
- Velella Epsilon staff will ensure that all nets, mooring and rigging lines, and anti-predator equipment will be stretched tight/taut and maintained in a manner to diminish the likelihood of entangling finfish, sea birds, marine mammals, and sea turtles.
- The captain will ensure that all vessels have an implemented SOP.
- Velella Epsilon staff will conduct timed submersible net pen procedures (including in less-than-ideal weather conditions) to asset the time, staff, and equipment necessary for properly and safely sink the net pen cage.
- Velella Epsilon staff will additionally conduct land base facility operations to organize and secure equipment, cage materials, feed, processing, and support vessels to reduce loss or damage resulting from flooding and wind.

- Velella Epsilon staff have developed a list of appropriate agencies to contact in the event of a disaster response that includes, but is not limited to, the EPA, U.S. Army Corps of Engineers, and National Marine Fisheries Service.

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- Chemical wastes and spilled chemicals shall be properly stored and removed from the facility and disposed of at an approved facility.

2.2 Potential Risks

The following potential risks have been identified for each of the following types of disasters; vessel strikes, extreme weather events, tropical storms, and hurricanes. Potential risks associated with entanglement of mammals (and other sensitive marine species) are captured in the *Marine Mammal, Sea Turtle, and Seabird Monitoring and Data Collection Plan for the Velella Epsilon Project – Pioneering Offshore Aquaculture in the Southeastern Gulf of Mexico* (Ocean Era, 2020b).

2.2.1 Vessel Strikes

Unintentional vessel strikes to the net pen array from commercial fishing, recreational, or cargo sea faring traffic potentially may occur due to negligence, loss of navigational aids, undetectable farm location, congested navigation traffic, or derelict vessel collision. Potential risks are:

- Net pen array damage
- Tender and support vessels damage
- Equipment damage or loss
- Fish escapes
- Human injury

Unintentional vessel strikes to the net pen array are nearly unavoidable. Velella Epsilon staff and the Captain will monitor all available communication channels and frequencies to include, but limited to the following:

- Rescue 21 Distress System Coverage
- HF Distress Frequencies
- MF & HF Channels & Frequencies
- U.S. VHF Channels & Frequencies
- Intl VHF Channels and Frequencies

2.2.2 Extreme Weather Events, Tropical Storms, and Hurricanes

Potential risks associated with extreme weather events, tropical storms, and hurricanes include the following:

- Net pen array damage
- Tender and support vessels damage
- Equipment damage or loss
- Fish escapes
- Human injury

2.3 Implemented Procedures

The following procedures have been identified to prevent, control, and/or minimize the impacts to the facility potentially caused by disasters; including extreme weather events, tropical storms, and hurricanes. Velella Epsilon staff and the Captain will take the following actions to avoid any potential risks associated with extreme weather events, tropical storms, and hurricanes:

- Monitor all current weather dispatches and tropical disturbance warnings and events.
 - **nowCOAST®** is a GIS-based online web mapping service that provides frequently updated weather and ocean observations, coastal and marine weather warnings and forecasts, and potential storm surge flooding maps.
 - **Storm QuickLook** is a product that provides a synopsis of near real-time oceanographic and meteorological observations at locations affected by a tropical cyclone.
 - **PORTS®** is a Physical Oceanographic Real Time System: A NOS service to deliver real-time oceanographic and meteorological data designed primarily for mariners, but with applications for coastal management and emergency operations.
 - **IOOS®** is an Integrated Ocean Observing System: A network of regional ocean observing systems designed to track, predict, manage and adapt to changes in the ocean, coastal and Great Lakes environment.
- Based on the Captain's decision, notification of any intentions for site evacuation will be made to:
 - At sea Velella Epsilon staff and management
 - USCG
 - Shore base Velella Epsilon staff and management
 - Appropriate regulatory authorities, once all safety precautions have been completed
- Time and safety permitting, administer an additional and appropriate feed rationing to the stock
- Stow all on deck equipment, supplies, feed, and containers as typically performed in preparation for an open ocean voyage return to the Velella Epsilon shore base facilities.
- Traditional industry measures will be taken for storing, transferring, handling, using, and disposing of chemicals.

- Velella Epsilon staff will inspect the net pen array system in order to ensure that it is properly functioning and secure.
 - Special attention will be given to connectors and rope/chain interfaces.
 - Operators will inspect and adjust mooring systems; however, consideration will be given considering the relative health and safety risks and benefits associated with the inspection at this time
 - Shackles used in mooring systems will be either safety shackled, wire-tied, or welded to prevent pin drop-out.
- The Velella Epsilon staff will ensure that all nets, mooring and rigging lines, and anti-predator equipment will be stretched tight/taut and maintained in a manner to diminish the likelihood of entangling finfish, sea birds, marine mammals, and sea turtles.
- The Velella Epsilon staff will implement the submersible staging procedures of the net pen array:
 - Firmly securing all net pen service accesses and the jump/predator (bird) netting
 - Opening the buoyance valves and bleeding the air from the floatation rings and ballasts
 - Monitor a controlled lowering of the net pen visually and via camera monitors (as available)
 - Confirm the new positioning and secured mooring of the net pen several meters above the sea floor
 - Confirm the security and operational lighting of the farm site's navigational buoys

2.4 Containment Equipment

The following describes the appropriate materials, supplies, and equipment necessary for the containment of stock at the facility. Each of the materials has been engineered and designed with specifications for supporting the integrity of the net pen array during a 10-year average Category 5 Hurricane.

A single PolarCirkel-style net pen array would be deployed short-term (1-2 years) using:

- Offshore-strength submersible system,
- 17 m diameter x 7 m depth (deep),
- Effective volume ~ 1,600 m³

On a multi-anchor (3) swivel (MAS)-point mooring system; using embedment-type anchor mooring; and serviced by a tender vessel/feed barge tethered to side of net pen system

Structural Integrity Highlights:

- Withstand 200-Year Storm Submerged 40 Feet Below Surface
- Three (3), 3 Ton Stevpris Mk-5 Embedment Anchors
- MAS ensures Net Pen Array can Pivot in Watch-circle

A) Deadweight Anchors (concrete):

- Three (3) anchors equally spaced @:
 - 120m from mooring centerline
 - 120 degrees from each other
- Each @ 3-ton Stevpris Mk-5 drag embedment anchor

B) Mooring Chain (Grade 2 steel):

- 80m length on each anchor
- 50mm (2") thick links
- No load = 70m length of each on seafloor
- Design load = some entirely off seafloor/others completely on seafloor

C) Mooring Lines (rope):

- 40m length on each chain
- AMSTEEL®-BLUE
- 36mm (1 1/2") thick lines

D) Spar Buoy w/ Swivel (steel):

E) Bridle Lines (rope inside HDPE pipe):

- Three (3) ~30m bridle lines (rope) from swivel to spreader bar
- AMSTEEL®-BLUE
- 33.3mm (1 5/16") lines inside HDPE pipe

F) Spreader Bar (HDPE):

- Header Bar (load bearing) connected to Bridle Lines
 - 30m in length
 - 0.36m OD DR 11 HDPE pipe
- Side and Rear Bars (smaller load bearing)
 - 30m in length
 - 0.36m OD DR 17 HDPE pipe
- Four (4) corner spar buoys

G) Net Pen Connection Lines (rope):

- Four (4) ~13m connection lines (rope)
- Connected from Spreader Bar to Net Pen Float Rings
- AMSTEEL®-BLUE
- 33.3mm (1 5/16") lines

H) Net Pen Frame Structure (HDPE):

- Top Frame Structure
 - 18m in diameter
 - One (1) HDPE side-by-side Float Rings
 - On the sea surface
 - ~ 0.36m OD DR 11 HDPE pipe
 - One (1) HDPE net ring (railing)
 - Connected ~ 1.0m above Float Rings
 - Connected to Net Pen Mesh
 - ~ 0.15m OD DR 17 HDPE pipe
- Bottom Frame Structure
 - 18m in diameter
 - One (1) HDPE sinker ring
 - 7.0m below Float Rings
 - Connected to Net Ring

- ~ 0.36m OD DR 11 HDPE pipe
 - One (1) HDPE net ring
 - 7.0m below float rings
 - Connected to copper alloy mesh
 - ~ 0.15m OD DR 17 HDPE pipe
- I) Net Pen Mesh (copper alloy):
 - 17m diameter x 7m depth
 - Top connected to top net ring (railing)
 - Bottom connected to bottom net ring
 - 4mm wire diameter
 - 40mm x 40mm mesh square
 - Effective volume of 1,600m³
- J) Shackle Point Connection (steel):
 - One (1) ~0.13m² shackle plate
 - Four (4) connection lines
 - 12 mm in diameter x 10m in length
 - Connected from shackle plate to HDPE sinker ring
 - ~1m Grade 2 steel chain (32mm) connected to Floatation Capsule
- K) Floatation Capsule (steel):
 - ~ 1.5m in diameter x ~3.45m in length
 - Effective floatation volume = 6m³
 - ~3m Grade 2 steel chain (32mm) connected to Counter Weight
- L) Counter Weight (concrete):
 - ~ 1.1m in diameter x ~2.2m in length
 - Effective weight of 5 MT

2.5 Reporting System

The reporting system proposed for use to alert responsible facility management and appropriate regulatory authorities during disasters will include a variety of methods based on connectivity with those systems while operating 45 nm offshore. These systems will include, but not be limited to:

- Satellite Phone
- Email
- Cell Phone
- Rescue 21 Distress System Coverage
- HF Distress Frequencies
- MF & HF Channels & Frequencies
- U.S. VHF Channels & Frequencies
- Intl VHF Channels and Frequencies

2.6 Emergency Contact List

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2.7 Fish Transfer

The following procedures will be implemented to contain and transfer commercial fish in a manner which shall prevent the entry of commercial aquatic life into waters of the United States. Two points of transfer of fish will be employed during the 12-month Velella Epsilon Project operation; fingerling stocking and fish harvest. Further details of prevention of escapes may be found in Section 5.2 *Escape Prevention of the Best Management Practices (BMP) Plan for the Velella Epsilon Project – Pioneering Offshore Aquaculture in the Southeastern Gulf of Mexico*.

2.7.1 Fingerling Stocking

The following activity elements are associated with the initial stocking of fingerlings in the offshore net pen. To ensure the greatest sea faring safety of staff and fingerlings, the day of transfer will be scheduled only on a day of extremely favorable weather conditions.

- Truck hauling of fingerlings in 1M³ carboys from the hatchery to the dockside
- Forklift transfer of the 1M³ carboys from the truck to the transfer vessel
- Navigational transit of the transfer vessel from dockside to the Velella Epsilon offshore farm site
- Fish pump transfer of the fingerlings from the 1M³ carboys into the nursery net

2.7.2 Fish Harvest

The following activity elements are associated with the final harvest of adult fish from the offshore net pen into the harvest transfer vessel hold. To ensure the greatest sea faring safety of staff and harvest, the day of transfer will be scheduled only on days of favorable weather conditions.

- The harvest transfer vessel is moored securely adjacent to the net pen
- Inside the net pen, a large seine net will be deployed by several staff to concentrate fish into close quarters for grading and net selection
- Netted fish will be placed into a closed transfer bag attached to a powered lift davit crane
- The davit crane transfers the transfer bag to the hold in the transfer vessel
- Harvested fish are bled ungutted/head on and iced into 1M³ carboys
- Navigational transit of the transfer vessel from the Velella Epsilon offshore farm site to dockside
- Davit crane transfer of the 1M³ carboys from the transfer vessel to the processing truck
- Truck hauling of 1M³ carboys of harvested fish from dockside to processing plant

2.8 Emergency Procedures

Structural failure (emergency procedures) were addressed in Section 2.1.3 Containment Equipment, where the net pen materials have been engineered with design specifications for supporting the integrity of the net pen array during a 10-year average Category 5 Hurricane. The following emergency procedures will be implemented to minimize fish escapes.

- Velella Epsilon staff will inspect the net pen array system in order to ensure that it is properly functioning and secure.
 - Special attention will be given to connectors and rope/chain interfaces.
 - Operators will inspect and adjust mooring systems; however, consideration will be given considering the relative health and safety risks and benefits associated with the inspection at this time
 - Shackles used in mooring systems will be either safety shackled, wire-tied, or welded to prevent pin drop-out.
 - Firmly securing all net pen service accesses and the jump/predator (bird) netting
 - Maintaining the proper working condition of the buoyance valves and floatation rings and ballasts
- During fish transfer, additional staff will monitor the operations and assess the process for any weaknesses that may result in escapees.
 - Should an inadvertent escape occur, the additional staff will attempt to catch the fish and return it to the net pen. Industry observations have documented that escaped cultured fish have the tendency to remain in proximity to the structure in which they have been raised (recognizing it as their food source), thus making recapture an uncomplicated procedure.
 - If escapees are not recaptured, the fish are F1 progeny resulting from indigenous male and female stock originally captured in this same area off Madeira Beach, Florida, thus resulting in no genetic dilution or contamination.

2.9 FDPC Plan Review & Endorsement

We, the Velella Epsilon management, Deep Sea Traveler Captain, and the individuals responsible for implementing the FDPC Plan, certify that we have reviewed and have an operational familiarity with the prevention practices of the FDPC Plan.

Velella Epsilon Demonstration Project

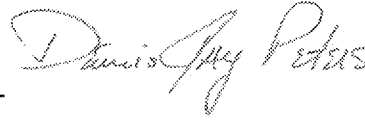
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(Other Individual – Printed Name & Title)

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(Other Individual – Signature)

(Other Individual – Printed Name & Title)

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3.0 Disaster Response

In the event of a disaster, the Velella Epsilon team will undertake the following disaster response efforts to limit and prevent environmental impacts and the release of commercial aquatic life into the waters of the United States.

3.1 Notification Procedures:

The Velella Epsilon staff will implement the following procedures for notification of the appropriate agencies as soon as possible and within 24 hours of any disaster impacting the facility. The reporting system proposed for use to alert responsible facility management and appropriate regulatory authorities during disasters will include a variety of methods based on connectivity with those systems:

- Satellite Phone
- Email
- Cell Phone
- Rescue 21 Distress System Coverage
- HF Distress Frequencies
- MF & HF Channels & Frequencies
- U.S. VHF Channels & Frequencies
- Intl VHF Channels and Frequencies

3.1.1 Emergency Contact List

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3.2 Emergency Procedures Reporting

The Velella Epsilon team will provide a report (Appendix A) of any emergency procedures used during a disaster and submitted in a reasonable timeframe (contingent upon the duration of **Section 3.3 Response and Cleanup Efforts**) post disaster. The report shall include the cause of the disaster, fish escape information, facility and/or fish recovery efforts, and the effectiveness of any emergency efforts deployed.

3.3 Response and Cleanup Efforts

The Velella Epsilon team will implement the following procedures for commencing a response, recovery, and cleanup efforts. The team is committed to completing such efforts as soon as safely possible and such actions will take precedence over normal work activities. The Velella Epsilon team understands that if any farm site equipment, supplies, or net per array components break loose from the farm site, that marine debris is a threat to our environment, navigation safety, the economy, and potentially human safety and health.

- Post storm/disaster, and as soon as it is safe to navigate or fly over the Velella Epsilon farm site, management will dispatch a reconnaissance team to explore and assess any potential facility damage that may have occurred.
- If the submersible net pen array is found in sound, functional order, the reconnaissance team will notify management to have normal operations resumed.
- GPS transponders aboard the net pen array would provide regular automated reporting of the array's position. If staff detect that the net pen is outside of the expected operating area, they will use GPS information to launch an emergency response in a timely manner.
- If the submersible net pen array is found in a damaged or loss state, the reconnaissance team will notify management to implement the reporting procedures identified in Section 3.1.
- Management will also communicate with USACE and NOAA spatial SMEs to ascertain if the location of any facility components has been observed and/or identified to be associated with the Velella Epsilon Project.
- A navigational reconnaissance and recovery team will be dispatched to the observation sites to recover the farm site components and associated debris.
- All recovered farm site components and associated debris will be properly disposed of onshore, repaired, or reassembled on the net pen array.
- If the submersible net pen array is found still attached to the mooring, but damaged, the reconnaissance team will notify management to commence repair operations.
- Should inadvertent escapes occur, staff will attempt to catch the fish and return them to the net pen (if intact) or harvest the fish (procedures above) and transport them to shore base facilities for processing.
 - Industry observations have documented that escaped cultured fish have the tendency to remain in proximity to the structure in which they have been raised (recognizing it as their food source), thus making recapture an uncomplicated procedure.
 - If escapees are not recaptured, the fish are F1 progeny resulting from indigenous male and female stock originally captured in this same area off Madeira Beach, Florida, thus resulting in no genetic dilution or contamination.

3.4 Procedures for Debris and Fish Carcass Disposal

- All recovered debris (feed bags, packaging materials, waste rope, buoy and mooring line, worn structural components, and netting) will be collected and properly stored on the tender vessel, and returned to shore and properly disposed of.
- Recycling of any material or equipment components will be strongly considered.
- Discharge associated with transport or harvesting of aquatic animals (including blood, viscera, carcasses, or transport water containing blood) will be minimized through proper containment and disposal at an appropriate shore-based facility.
 - Any such material and liquids will be properly stored in plastic bags within sealed containers on the tender vessel until the next opportunity for transport back to shore.
 - Carcasses from mortalities will be routinely (when observed) removed from the net pen system will be either refrigerated or frozen in plastic bags within sealed containers on the tender vessel until the next opportunity for transport back to shore (Appendix H).
 - Mortalities will be disposed of, and notification given in, accordance with Disposal of Dead Animals BMPs.

3.5 FDPC Plan Review & Endorsement

We, the Velella Epsilon management, Machias Captain, and the individuals responsible for implementing the FDPC Plan, certify that we have reviewed and have an operational familiarity with the disaster response requirements of the FDPC Plan.

Velella Epsilon Demonstration Project

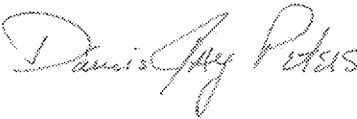
(Facility Name)

FLOA00001

(NPDES #)

Dennis Jay Peters

(Facility Manager – Printed Name)



(Other Individual – Printed Name & Title)

(Other Individual – Signature)

(Other Individual – Printed Name & Title)

(Other Individual – Signature)

(Other Individual – Printed Name & Title)

(Other Individual – Signature)

APPENDIX A

EMERGENCY PROCEDURES USED DURING A DISASTER

WRITTEN REPORT FOR EMERGENCY PROCEDURES USED DURING A DISASTER

Veella Epsilon Demonstration Project

NPDES Permit Number: **FL0A00001**

NAME OF PERSON SUBMITTING THIS FORM: _____

DATE THIS WRITTEN REPORT WAS SUBMITTED TO THE PERMITTING AUTHORITY: _____

Cause of the Disaster / Failure or Damage	Date Disaster / Failure or Damage Occurred	Time Elapsed Until the Failure or Damage was Repaired	Materials Released or Fish Escapes to the Environment from the Failure or Damage (Estimate)	Fish Escape Recovery Efforts	Effectiveness of any Emergency Efforts Deployed